

Notes on Begoniaceae -- III

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In continuing preparation of an illustrated key to all the natural species of Begoniaceae we are again indebted to Jack Golding and Carrie Karegeannes for careful editing of our manuscript and also for the discovery of many points that need the clarification which we are now giving here.

BEGONIA

*albomaculata* C. de Candolle, Bot. Mus. Paraense Hist. Nat. 4: 593. 1906, emend L. B. Smith & D. C. Wasshausen.

Planta glabra, caulescens. Caulis erectus; internodia 4-6 cm longa. Foliolorum stipulae mox deciduae; petioli ad 4 cm longae; laminae obliquae, ellipticae, 12-16 cm longae, 6-9 cm latae, basi truncatae vel emarginatae, apice late rotundatae apiculataeque, duplicato-dentatae. Inflorescentiae multae, bisexuales, dichotome ramosae sed dense pauciflorae ergo pseudumbellatae; pedunculus brevissimus; bracteae deciduae, late ellipticae, 4 mm longae, integrae. Florum masculinorum tepala 4, alba vel rosea, exteriora orbiculata, 4 mm longa, interiora oblonga, breviora. Stamina pauca, libera; filamenta brevissima; antherae oblongae, connectivum breviter productum, obtusum. Florum femineorum tepala 2, elliptica, 6 mm longa. Ovarium ellipsoideum, tripartitum; placentae bilamellatae, ubique ovuliferae; stili bipartiti, alte connati. Pedicelli fructiferae crassi, 1 mm longi. Capsulae 9 mm longae; alae aequales, marginiformes, 3 mm latae; semina late rotundata. Pl. 1.

PERU: Loreto: Hills in the Rio Ucayali region, collector (?), 25 November 1898, cultivated in the Horto Botanico of the Museu Goeldi (MG, holotype).

The emended description drawn from the following material:

ECUADOR: EL ORO: In dense rain forest, Moro-Moro region (about 21 miles west of Portovelo), alt. (3,400-4,200 ft.) 1100-1400 m, 1 October 1944, Camp E-618 (NY, US); partly primary mountain rain forest, road Piñas to Santa Rosa, above El Placer, alt. 800-1000 m, 15 November 1977, Harling, Eliasson & Andersson 15551 (S, US); creek bed, road from Piñas to Santa Rosa, km. 19, alt. 460 m, 7 October 1979, Dodson, Gentry & Shupp 8914 (SEL, US).

albopicta W. Bull. Rare Plants Catalogue 210:13 London 1855; Gartenflora 35:402. 1886; Irmscher, Parey Blumengart. 79. 1960.

= *maculata* Raddi var. *maculata* 1820.

asteroides L. B. Smith & B. G. Schubert, Contr. Gray Herb. 127: 30. 1939; 154:31. 1945.

= *uruapensis* Sessé & Mocino 1890.

- barahonensis (O. E. Schulz) Urban in Fedde, Repert. 18: 193.  
1922.  
= plumieri var. barahonensis O. E. Schulz 1911.
- barsalouxiae Standley & Williams, Ceiba 1:154. 1950.  
= plebeja Liebmann var. plebeja 1852.
- binotii hort. ex C. Chevalier, Begonias 256. 1938.  
= paulensis A. de Candolle 1859.
- biolleyi C. de Candolle, Bull. Soc. Roy. Bot. Belgique 35:263.  
1896; K. Burt-Utley, ms. ined.  
= sericoneura Liebmann 1852.
- boquetensis Irmscher, Bot. Jahrb. Syst. 78:179, pl. 8, f. 1.  
1959; K. Burt-Utley, ms. ined.  
= urophylla W. J. Hooker 1855.
- brasiliensis Klotzsch, Monatsber. Konigl. Preuss. Akad. Wiss.  
Berlin 122. 1854, nomen nudum; Abh. Konigl. Akad. Wiss.  
Berlin "1854" 1855; Begoniac. 55. 1855.  
= fischeri var. fischeri Schrank 1820.
- brongniartii Lemaire, Hortic. Universel 4:136, pl. 1843.
- brongniartiana Lemaire ex A. de Candolle, Prodr. 15(1):400. 1864.  
nomen nudum.
- californica T. S. Brandege, Proc. Calif. Acad. Sci. 3:140. 1891.  
= palmeri S. Watson 1886.
- camiguinensis Elmer, Leaflet. Philipp. Bot. 7:2553. 1915.  
= acuminatissima Merrill "1911" 1912.
- carallina Carrière, Rev. Hort. 89. 1875.  
= corallina Carrière 1875.
- cilibracteola C. de Candolle, Smithsonian. Misc. Collect. 69(12):  
5. 1919.  
= fischeri var. fischeri Schrank 1820.
- clarkei J. D. Hooker, Bot. Mag. 93: pl. 5675. 1867. Peru, Bolivia.  
A distinct species from cinnabarina Hooker 1849.
- cobana C. de Candolle, Bull. Herb. Boissier II. 8:322. 1908.  
= sarchophylla Liebmann 1852.
- comorensis Warburg, Bot. Jahrb. Syst. 22:38. 1895.  
= salaziensis (Gaudichaud) Warburg var. comorensis (Warburg)  
L. B. Smith & D. C. Wasshausen, comb. nov., stat. nov.
- crenatiflora (Klotzsch & Putzeys) A. de Candolle, Prodr. 15(1):  
306. 1864.  
= biserrata Lindley 1847.
- cylindricaulis Brade, Arq. Jard. Bot. Rio de Janeiro 13:169.  
1954.  
= pulchella Raddi 1820.
- diversifolia Knowles & Westcott, Flor. Cab. pl. 14. 1837.  
= gracilis Humboldt, Bonpland & Kunth var. diversifolia  
A. de Candolle, Prodr. 15(1):310. 1864. Their descrip-  
tion is "foliis radicalibus reniformibus", indicating  
that probably they used Graham's name without citing  
any author.
- dubia Vellozo, Fl. Flum. Icon. 10: pl. 42. 1831; descr. Arch.  
Mus. Nat. Rio de Janeiro 5:405. 1881.  
= radicans Vellozo 1831.
- elata Klotzsch, Begoniac. 35. 1855.

- = *fischeri* Schrank var. *fischeri* 1820.  
*fischeri* var. *brasiliensis* (Klotzsch) Irmscher, Bot. Jahrb. Syst. 76:24. 1953.  
= *fischeri* Schrank var. *fischeri* 1820.  
*fischeri* var. *elata* (Klotzsch) Irmscher, Bot. Jahrb. Syst. 76:24. 1953.  
= *fischeri* Schrank var. *fischeri* 1820.  
*fischeri* var. *eufischeri* Irmscher, Bot. Jahrb. Syst. 76:24. 1953.  
= *fischeri* Schrank var. *fischeri* 1820.  
*fischeri* var. *moritziana* (Klotzsch) Irmscher, Bot. Jahrb. Syst. 76:24. 1953.  
= *fischeri* Schrank var. *fischeri* 1820.  
*fischeri* var. *tovarensis* (Klotzsch) Irmscher, Bot. Jahrb. Syst. 76:23. 1953.  
= *fischeri* Schrank var. *fischeri* 1820.  
*fissisepala* C. de Candolle, Bull. Herb. Boiss. II. 8:319. 1908.  
= *umbellata* Humboldt, Bonpland & Kunth 1825.  
*fissurarum* C. de Candolle, Smithsonian Misc. Collect. 69(12):2. 1919.  
= *plebeja* Liebmann var. *plebeja* 1852.  
*fonsecae* Standley, Ceiba 3:150. 1952.  
= *polygonata* Liebmann var. *polygonata* 1852.  
*grandibracteolata* Irmscher, Bot. Jahrb. Syst. 76. 91. 1953.  
= *aeranthos* L. B. Smith & B. G. Schubert 1952.  
*gunnerifolia* Linden, Cat. 93:3. 1875; Linden & André, Ill. Hort. 22:106, pl. 212. 1875.  
= *parviflora* Poepp. & Endl. 1835.  
*guyanensis* var. *cearensis* C. de Candolle, Bull. Herb. Boiss. II. 1:315. 1901.  
= *humilis* Dryander var. *humilis* 1789.  
*hayatae* Gagnepain, Bull. Mus. Hist. Nat. (Paris) 25:282. 1919.  
= *aptera* Blume 1827.  
*hieronymi* var. *rhacophylla* Irmscher, Bot. Jahrb. Syst. 74:619. 1949.  
= *micranthera* var. *rhacophylla* (Irmscher) L. B. Smith & D. C. Wasshausen, comb. nov.  
*hoegeana* Regel & Schmidt, Gartenfl. 35:398. 1886.  
= *glabra* Aublet, var. *glabra* 1775.  
*hymenophylloides* F. K. Ward, Gard. Chron. III. Cov. 474. 1928.  
*nomen nudum*; F. K. Ward ex L. B. Smith & D. C. Wasshausen, sp. nov.  
Planta acaulis, tuberosa, verisimiliter glabra. Folium solitarium; stipulae deciduae, ignotae; petioli graciles, ca. 8 cm longi; laminae oblongo-ovatae, ca. 25 cm longae, 10 cm latae, pinnato-nervatae, base late cordatae, apice longe attenuatae; 3-5-lobatae, bullatae. Inflorescentiae unisexuales, 1-2-dichotomae; pedunculus ca. 15 cm longus; bractae persistentes, ovatae, ca. 5 mm longae. Florum masculinorum tepala 4, subaequalia, ovata, ca. 1 cm longa, alba; femineorum ignota. Fructus, capsula, aequaliter tripartita, alae apice truncatae, triangulares.  
TIBET-BURMA frontier: forest, 27° 30' N, 97° 50' E, alt. 1500-1800 m, 24 August 1926, F. K. Ward 7334 (K).

- inanis Irmscher, Bot. Jahrb. Syst. 74:616. 1949. B. rosacea sensu L. B. Smith in part, Phytologia 27:212. 1973.  
B. quetamensis L. B. Smith & Schubert, Caldasia 4(16): 8, pl. 1. 1946.  
= novo-granatae A. de Candolle 1864.
- intercedens Irmscher, Bot. Jahrb. Syst. 76:97. 1953.  
= fischeri Schrank var. malvacea (Klotzsch) Irmscher 1953.
- kaletukensis Tutin, J. Bot. 78:250. 1940.  
= fischeri Schrank var. fischeri 1820.
- karwinskyana A. de Candolle, Ann. Sci. Nat. Bot. IV. 11:135. 1859; K. Burt-Utley, ms. ined.  
= fusca Liebmann 1852.
- kraussiantha Irmscher, Bot. Jahrb. Syst. 78:183, pl. 8, fig. 2. 1959.  
= pringlei S. Watson 1891.
- lanuginosa A. de Candolle, Ann. Sci. Nat. Bot. IV. 11:131. 1859.  
= sericoneura Liebmann 1852.
- latistipula Engler, Veg. Erde 9(3.2):616. 1921, non Merrill 1915.  
= gracilicaulis Irmscher 1921.
- leptophylla C. de Candolle, Bull. Herb. Boissier II. 8:319. 1908; K. Burt-Utley, ms. ined.  
= plebeja Liebmann 1852.
- leptotricha C. de Candolle, Bull. Soc. Bot. Genève II. 6:121, pl. 4. 1914.  
= subvillosa Klotzsch, Begoniac. 32. 1855. var. leptotricha (C. de Candolle) L. B. Smith & D. C. Wasshausen, comb. nov., stat. nov.
- lichenoides L. B. Smith & B. G. Schubert, Publ. Mus. Hist. Nat. "Javier Prado" Ser. B. Bot. 17:10, pl. 4. 1963.  
= weberbaueri Irmscher 1953.
- lineata N. E. Brown, Gard. Chron. 18:199. 1882.  
= tenuifolia Dryander 1791.
- lobulata A. de Candolle, Prodr. 15(1):339. 1864.  
= sarchophylla Liebmann 1852.
- lynchiana J. D. Hooker, Bot. Mag. 110: pl. 6758. 1884.  
= cyathophora Poeppig & Endlicher 1835.
- macbrideana Irmscher, Bot. Jahrb. Syst. 71:87. 1953.  
= erythrocarpa A. de Candolle 1859.
- macroptera var. paludum A. de Candolle in Martius, Fl. Bras. 4(1): 346. 1861.  
= fischeri var. macroptera (Klotzsch) Irmscher 1953?
- macroptera var. pohlana (Klotzsch) A. de Candolle in Martius, Fl. Bras. 4(1):346. 1861.  
= fischeri var. macroptera (Klotzsch) Irmscher 1953.
- macrura Gilg, Bot. Jahrb. Syst. 34:92. 1904. B. longepetiolata Gilg 1905.  
= squamulosa J. D. Hooker 1871.
- meyeniana Walpers, Nov. Actorum Acad. Caes. Leop.-Carol. Nat. Cur. Suppl. 2 (19. suppl. 1):403. 1843.  
= humilis Dryander 1789.
- modesta Liebmann, Vid. Medd. Naturh. For. Kjobhavn 20. 1852.  
= wallichiana Steudel ex Lehmann 1850.

- monticola Ridley, J. Fed. Malay States Mus. 5:34. 1914, non C. de Candolle 1908.  
= alpina L. B. Smith & D. C. Wasshausen, nom. nov.
- moritziana Klotzsch, Begon. 31. 1855.  
= fischeri Schrank var. fischeri 1820.
- moritziana Klotzsch ex A. de Candolle, Prodr. 15(1):292. 1864, nomen in synon.  
= meridensis A. de Candolle 1859.
- natalensis W. J. Hooker, Bot. Mag. 81: pl. 4841. 1855.  
= dregel Otto & Dietrich 1836.
- nicaraguensis Standley, Publ. Field Mus. Nat. Hist. Bot. Ser. 4: 237. 1929; K. Burt-Utley, ms. ined.  
= sericoneura Liebmann 1852.
- nigrescens Van Houtte, Hamb. Gartens 8:9. 1952.  
= heracleifolia Schlechtendal & Chamisso 1830.
- nigro-venia Regel, Gartenfl. 16:163, pl. 546. 1867.  
= pinetorum A. de Candolle 1859.
- obliqua Vellozo, Fl. Flum. Icon. pl. 48. 1831; descr. Arch. Mus. Nac. Rio de Janeiro 406. 1881.  
= fischeri Schrank var. fischeri 1820.
- pendula O. E. Schulz in Urban, Symb. Ant. 7:7. 1911, non Ridley 1906.  
= pensilis L. B. Smith & D. C. Wasshausen, nom. nov.
- pilifera A. de Candolle, Prodr. 15(1):337. 1864; K. Burt-Utley, ms. ined.  
= sericoneura Liebmann 1852.
- poeppigiana A. de Candolle, Prodr. 15(1):376. 1864.  
= foliosa Humboldt, Bonpland & Kunth var. australis L. B. Smith & B. G. Schubert 1946.
- pohlana Klotzsch, Begon. 33. 1855.  
= fischeri Schrank var. macroptera (Klotzsch) Irmscher 1953.
- polyantha Ridley, J. Fed. Malay States Mus. 8(4):38. 1917, non Léveillé 1916.  
= sychnantha L. B. Smith & D. C. Wasshausen, nom. nov.
- populifolia sensu Liebmann, Vid. Medd. Naturh. Vor. Kjobenhavn 16. 1852.  
= fischeri Schrank var. fischeri 1820.
- procumbens Vellozo, Fl. Flum. Icon. 10: pl. 36. 1831; descr. Arch. Mus. Nat. Rio de Janeiro 5:403. 1881.  
= radicans Vellozo 1831.
- quetamensis L. B. Smith & B. G. Schubert, Caldasia 4:8, pl. 1. 1946.  
= novogranatae A. de Candolle 1864.
- randaiensis Sasaki, List Pl. Form. 301. 1928.  
= palmata D. Don 1825.
- richardsoniana Merrill & Perry, J. Arnold Arbor. 24:48, pl. 3, e, f. 1943, non Houliet 1872.  
= mystacina L. B. Smith & D. C. Wasshausen, nom. nov.
- robustior Standley & Williams, Ceiba 1:155. 1950.  
= manicata Brongniart 1842.
- roezlii Lynch, Garden 24:162, pl. 402. 1883, non Regel 1876.  
= lyncheana J. D. Hooker 1884 = cyathophora Poeppig &

- Endlicher 1835.  
roraimensis Tutin, J. Bot. 78:251. 1940.  
= fischeri Schrank var. fischeri 1820.  
saxatilis Blume, Enum. Pl. Javae 1:95. 1827; Backer, Excurs.-Fl.  
Java 2:309. 1963.  
= muricata Blume 1823.  
schottiana A. de Candolle, Ann. Sci. Nat. Bot. IV. 11:140. 1859.  
= parvifolia Schott 1827.  
setifera A. de Candolle, Prodr. 15(1):338. 1864; K. Burt-Utley,  
ms. ined.  
= urophylla W. J. Hooker 1855.  
sordidissima Elmer, Leaf. Philipp. Bot. 7:2557. 1915.  
= mindorensis Merrill 1912.  
sylvestris A. de Candolle, Ann. Sci. Nat. Bot. IV. 11:140. 1859.  
= arborescens Raddi var. arborescens 1820.  
tenuipila C. de Candolle, Bull. Herb. Boissier II. 8:315. 1908;  
K. Burt-Utley, ms. ined.  
= plebeja Liebmann 1852.  
thermarum L. B. Smith & B. G. Schubert, J. Wash. Acad. Sci. 40:  
244, pl. 1, t-u. 1950; B. G. Schubert, ms. ined.  
= extensa L. B. Smith & B. G. Schubert 1946.  
tinctoria L. B. Smith & B. G. Schubert, Contr. Gray Herb. 127:29.  
1939; K. Burt-Utley, ms. ined.  
= strigillosa Dietrich 1851.  
tovarensis Klotzsch, Begoniac. 31. 1855.  
= fischeri Schrank var. fischeri 1820.  
tovarensis Klotzsch var. ocanensis A. de Candolle, Prodr. 15(1):  
303. 1864.  
= fischeri Schrank var. fischeri 1820.  
tovarensis Moritz in lit. ex Klotzsch, Begoniac. 31. 1855.  
= fischeri Schrank var. fischeri 1820.  
truncata Vellozo, Fl. Flum. Icon. 10: pl. 47. 1831; descr. Arch.  
Mus. Nat. 5:406. 1881; vitifolia var. grandis A. de  
Candolle in Martius, Fl. Bras. 4(1):369. 1861.  
= reniformis Dryander 1791.  
ulei C. de Candolle, Bull. Herb. Boiss. II. 8:313. 1908.  
= fischeri Schrank var. fischeri 1820.  
uliginosa Schott ex Klotzsch, Begoniac. 35. 1859.  
= fischeri Schrank var. fischeri 1820.  
uliginosa var. ermanii (Klotzsch) A. de Candolle in Martius, Fl.  
Bras. 4(1): 1861.  
= fischeri var. ermani (Klotzsch) Irmscher 1953.  
umbrata hort. ex A. de Candolle, Prodr. 15(1): 396. 1864; L. B.  
Smith & B. G. Schubert, Caldasia 4(18):186. 1946.  
= holtonis A. de Candolle 1859.  
unialata C. de Candolle, Bull. Herb. Boissier, II. 1:316. 1901.  
= convolvulacea (Klotzsch) A. de Candolle 1861.  
urticifolia J. E. Smith, Pl. Icon. pl. 45. 1790; L. B. Smith &  
B. G. Schubert, Caldasia 4(16):33. 1946.  
= urticae Linnaeus f. 1781.  
uvana C. de Candolle, Smithsonian Misc. Collect. 69(12):4. 1919;  
K. Burt-Utley, ms. ined.

- = plebeja Liebmann 1852.
- vellerea Klotzsch, Begoniac. 32. 1855.
- = fischeri Schrank var. fischeri 1820.
- villosa sensu Gardner, London J. Bot. 1:186. 1842 non Lindley 1829.
- = fischeri Schrank var. macroptera (Klotzsch) Irmscher 1953.
- vitifolia Schott var. bahiensis A. de Candolle in Martius, Fl. Bras. 4(1):369. 1861.
- = reniformis Dryander 1791.
- vitifolia Schott var. grandis A. de Candolle in Martius, Fl. Bras. 4(1):369. 1861.
- = reniformis Dryander 1791.

## GENERIC SYNONYMS

Casparya

- robusta A. de Candolle var. rubra A de Candolle, Prodr. 15(1): 275. 1864.
- = Begonia muricata Blume 1823.

Diploclinium

- rubrum (Blume) Miquel, Fl. Ned. Ind. 1:689. 1856.
- = Begonia muricata Blume 1823.
- tuberosum Miquel, Fl. Ned. Ind. 1:685. 1856.
- = Begonia muricata Blume 1823.

Doratometra

- bowringiana Seemann, Bot. Voy. Herald 379. 1857.
- = Begonia bowringiana Champion ex Bentham 1852.

Empetrum

- acetosum forma alba Rumphius, Herb. Amboin. 5:457, pl. 169, fig. 2. 1747 (typical); Merrill, Interpretation Rumphius's Herb. Amboin. 379. 1917.
- = Begonia muricata Blume
- acetosum forma cordiformia Rumphius, Herb. Amboin. 5:457. 1747.
- = Begonia mollis A. de Candolle?
- acetosum forma rubra Rumphius, Herb. Amboin. 5:457. 1747.
- = Begonia muricata Blume 1823.

Gireoudia

- fibrillosa Klotzsch, Begoniac. 86. 1855; K. Burt-Utley, ms. ined.
- = Begonia sericoneura Liebmann 1853.
- lobulata Klotzsch, Begoniac. 88, pl. 7C. 1855; A. de Candolle, Prodr. 15(1):337. 1864.
- = Begonia sarchophylla Liebmann 1855.
- pilifera Klotzsch, Begoniac. 86. 1855; K. Burt-Utley, ms. ined.

- = *Begonia sericoneura* Liebmann 1855.
- sarchophylla (Liebmann) Klotzsch, *Begoniaceae*. 88. 1855.
- = *Begonia sarchophylla* Liebmann 1853.
- setosa Klotzsch, *Begoniaceae*. 92. 1855; K. Burt-Utley ms. ined.
- = *Begonia urophylla* W. J. Hooker 1855.

#### Knesebeckia

- crenatiflora Klotzsch & Putzeys, *Begoniaceae*. 45. 1855.
- = *Begonia pedata* Liebmann 1853.

#### Lepsia

- poepigiana Klotzsch, *Begoniaceae*. 63. 1855.
- = *Begonia foliosa* Humboldt, Bonpland & Kunth var. *australis*  
L. B. Smith & B. G. Schubert.

#### Semibegoniella

- sodiroy C. de Candolle, Bull. Herb. Boissier II. 8:327. 1908.
- = *Begonia longirostris* Benth 1845.

#### Sphenanthera

- robusta Hasskarl ex Klotzsch var. rubra Hasskarl, Hort. Bogor.  
Descr. 349. 1858.
- = *Begonia muricata* Blume 1823.

#### Wageneria

- vitifolia (Schott) Klotzsch, *Begoniaceae*. 116. 1855.
- = *Begonia reniformis* Dryander 1791.

Plate I



*Begonia albomaculata*